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Like stars shimmering in the night sky, the twinkling lights of cities throughout the West are made possible, in part, by Utah's energy industries. Below ground, the state's large reserves of coal and gas—and today to a lesser extent, oil—provide the raw fuel stocks to fire power plants, warm homes, power vehicles, and light cities. To these ends, an array of firms, from those that utilize the raw resources, to the companies that transmit energy and all the firms in between, operate in Utah.

However, to speak of the "energy" industry is to speak of something artificial, ethereal. The economic statistics gathered by state and federal sources do not denote a single energy industry—likely because energy-related activities are so diverse that a single category would do the sector an injustice. For those reasons, energy is a hybrid group of 23 industries, which captures the essence of the state's energy industries. This hybrid industry had a banner year in 2006, posting an average annual employment of roughly 15,000—1.3 percent of the state's total employment—and a payroll in excess of $987 million—2.4 percent of all wages paid in the state.

In fact, the energy cluster's stars aligned, if you will, in 2005 when it experienced strong double-digit job growth—12.5 percent in that year and an additional 13.5 percent in 2006. This performance rivaled that of many of the state's industries. However, to put this in perspective, because of the cluster's small size relative to the state's economy, a 13.5-percent increase resulted in the addition of only 1,809 new jobs. With the growth figures from the past years in hand it would appear that all of the state's energy industries are expanding, but is this really the case?

In truth, Utah's energy cluster has boomed as of late because of the oil and gas subgroup of industries. From drilling, extraction, and refining, oil and gas has provided roughly two-thirds of all new energy-related jobs in the last two years. This subgroup is the engine of the cluster. While other subgroups are important contributors to energy's employment portfolio, their very nature precludes them from being engines of growth in their own right. For example, industries in the energy generation subgroup, because of the vast capital expenditures needed to add capacity, are unlikely to be high-growth drivers of the cluster—even though their internal need to replace an aging workforce may temporarily increase their demand for new labor.

Energy's other subgroups share a similar story. Energy transmission employment, which made up 20 percent of the cluster's jobs in 2006, has been flat for many years. On the basis of this historical data, additional job gains in this important industry subgroup are not likely in the coming years. While jobs in energy construction are showing an up-tick in the last few years, the feast-or-famine nature of this subgroup doesn't suggest it as a future driver for the sector either.

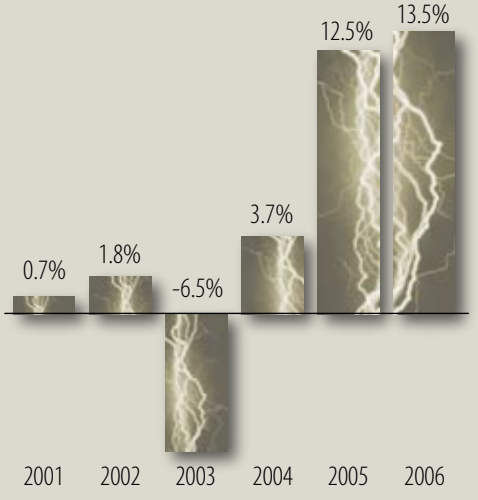
Another important contributor to energy employment is the mining subgroup, which has added jobs in the last three years, but appears to be plateauing in the latest data. On the other hand, the prospect of new coal and uranium mines coming online could be the catalyst for increased job growth in this subgroup. A further employment boost from the development of the state's oil shale and tar sands deposits is still years off, if possible at all.

Any discussion of Utah's energy industries would be incomplete without a few words on the consequences of the cluster's growth. Much of this activity is located in the eastern rural counties of the state which have small populations and limited financial resources. While the energy-related boom of the past several years has greatly increased both employment and tax revenues, it has also strained local economies and government services. For example, the potential labor force in many counties has been practically used up. This has forced wages to rise in nearly every industry, with those not keeping pace struggling to keep workers. Additionally, large transient worker populations have stressed local law enforcement budgets; a lack of affordable housing makes it difficult to attract non-energy-related workers to the area, and a multitude of infrastructure shortcomings confound development. These are just a few of the many local concerns related to Utah's energy industries.

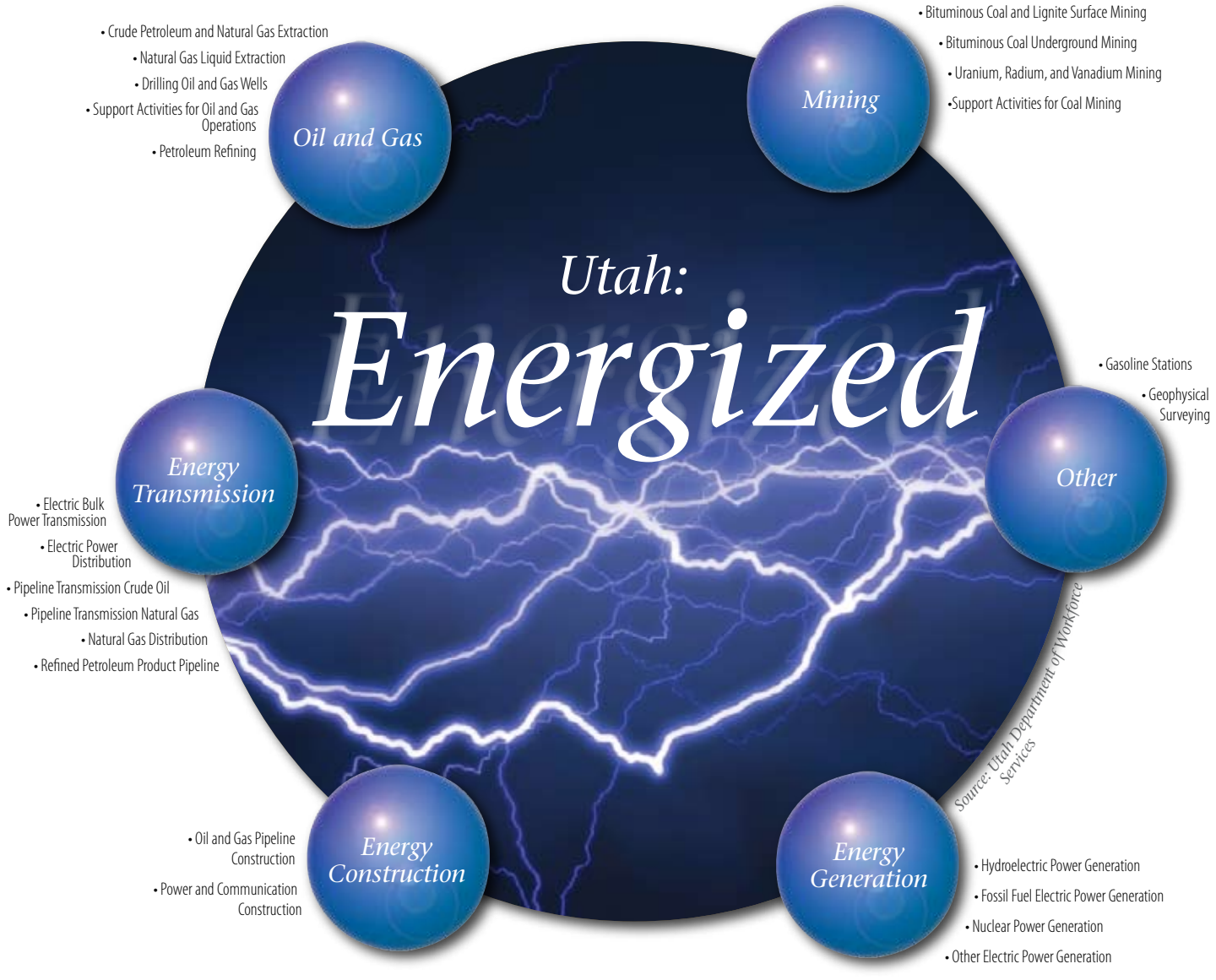
After shaking off a rather uninspired performance at the beginning of the decade, Utah's energy cluster has shown remarkable strength in the past two years. Going forward, the oil and gas subgroup of industries will likely continue in its role as the job-growth driver of the cluster. However, its ability to grow at current rates is far from assured—even in today's energy-hungry world economy. Unless local concerns are addressed, the companies that make up the state's energy cluster will find it difficult to find and keep workers. That said, at this time Utah's energy cluster certainly is energized.

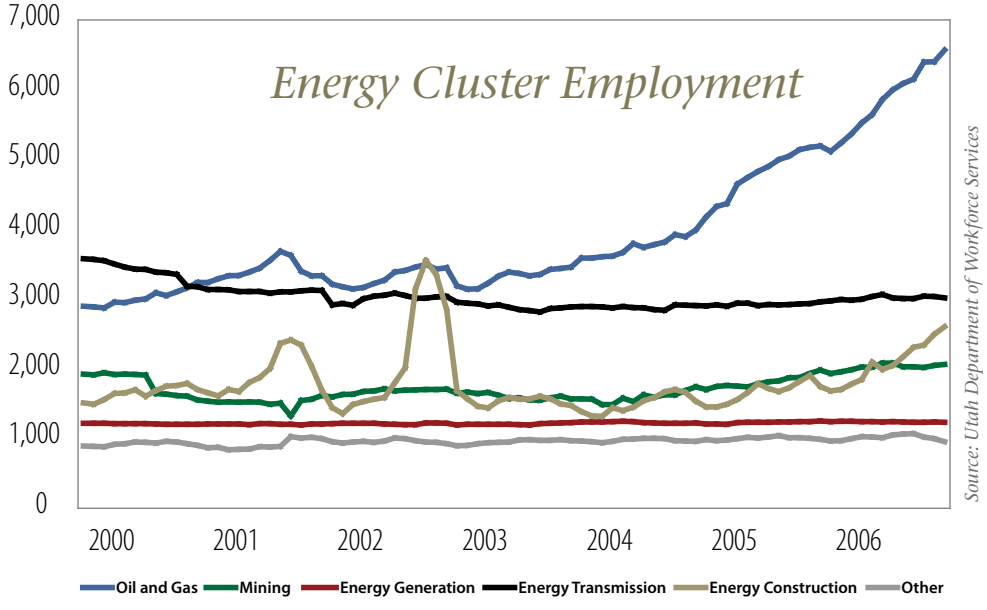
Utah's Energy Cluster

Year-over Job Growth Performance



Source: Utah Department of Workforce Services


Utah:
Energized
Oil and Gas
• Crude Petroleum and Natural Gas Extraction
• Natural Gas Liquid Extraction
• Drilling Oil and Gas Wells
• Support Activities for Oil and Gas Operations
• Petroleum Refining
Mining
• Bituminous Coal and Lignite Surface Mining
• Bituminous Coal Underground Mining
• Uranium, Radium, and Vanadium Mining
• Support Activities for Coal Mining
Energy Transmission
• Electric Bulk Power Transmission
• Electric Power Distribution
• Pipeline Transmission Crude Oil
• Pipeline Transmission Natural Gas
• Natural Gas Distribution
• Refined Petroleum Product Pipeline
Other
• Gasoline Stations
• Geophysical Surveying
Energy Construction
• Oil and Gas Pipeline Construction
• Power and Communication Construction
Energy Generation
• Hydroelectric Power Generation
• Fossil Fuel Electric Power Generation
• Nuclear Power Generation
• Other Electric Power Generation
Source: Utah Department of Workforce Services


Energy Cluster Employment
7,000
6,000
5,000
4,000
3,000
2,000
1,000
0
2000
2001
2002
2003
2004
2005
2006
Oil and Gas
Mining
Energy Generation
Energy Transmission
Energy Construction
Other
Source: Utah Department of Workforce Services